

AMENDMENTS TO THE CLAIMS

1. (Currently Amended) A manufacturing method of a semiconductor device in which a semiconductor substrate is subjected to processing includes pre-processing and post-processing, comprising;

a pre-processing step to process a semiconductor substrate;

a measurement step to measure a characteristic of said semiconductor substrate processed at said pre-processing step;

a setup step to set a processing condition for post-processing based on a result of the measurement at said measurement step;

a post-processing step to process said semiconductor substrate using said processing condition; and

an inspection step to inspect a characteristic of said semiconductor substrate processed at said post-processing step and to judge whether compliance with a predetermined standard is found or not,

and ~~characterized in further comprising re-processing step of~~ re-processing said semiconductor substrate judged not complying with said standard at said inspection step such that said semiconductor substrate complies with said standard.

2. (Original) The manufacturing method according to claim 1, characterized in that a processing condition for said reprocessing step is determined based on a result of the inspection at said inspection step.

3. (Original) The manufacturing method according to claim 1, characterized in that said re-processing step is one step selected from a group including said pre-processing step and said post-processing step.

4. (Original) The manufacturing method according to claim 1, characterized in that said re-processing step includes said pre-processing step, said measurement step, said setup step and said post-processing step.

5. (Currently Amended) ~~The manufacturing method according to claims 1 through 4, characterized in that~~ A manufacturing method of a semiconductor device in which a semiconductor substrate is subjected to processing includes pre-processing and post-processing, comprising;

a pre-processing step to process a semiconductor substrate;

a measurement step to measure a characteristic of said semiconductor substrate processed at said pre-processing step;

a setup step to set a processing condition for post-processing based on a result of the measurement at said measurement step;

a post-processing step to process said semiconductor substrate using said processing condition; and

an inspection step to inspect a characteristic of said semiconductor substrate processed at said post-processing step and to judge whether compliance with a predetermined standard is found or not,

and further comprising re-processing said semiconductor substrate judged not complying with said standard at said inspection step such that said semiconductor substrate complies with said standard, wherein said pre-processing step is a step at which an insulation film is deposited on said semiconductor substrate, and said post-processing step is a step at which said insulation film is etched using an etching condition determined from a measurement result regarding a film thickness of said insulation film.

6. (Currently Amended) ~~The manufacturing method according to claim 1,~~
~~characterized in that~~ A manufacturing method of a semiconductor device in which a
semiconductor substrate is subjected to processing includes pre-processing and post-
processing, comprising;

a pre-processing step to process a semiconductor substrate;

a measurement step to measure a characteristic of said semiconductor substrate
processed at said pre-processing step;

a setup step to set a processing condition for post-processing based on a result of
the measurement at said measurement step;

a post-processing step to process said semiconductor substrate using said
processing condition; and

an inspection step to inspect a characteristic of said semiconductor substrate
processed at said post-processing step and to judge whether compliance with a
predetermined standard is found or not,

and further comprising re-processing said semiconductor substrate judged not
complying with said standard at said inspection step such that said semiconductor
substrate complies with said standard, wherein said pre-processing step is a step at which
a field oxide film is formed on said semiconductor substrate, and said post-processing
step is a step at which said field oxide film is etched using an etching condition
determined based on a measurement result regarding at least one dimension selected
between a film thickness of said field oxide film and a width of an active layer region
sandwiched by said field oxide film, from a table showing a relationship between the
width of said active layer region and an etching quantity of said field oxide film, such
that the width of said active layer region has a predetermined dimension.

7. (Currently Amended) ~~The manufacturing method according to claim 1,~~
~~characterized in that~~ A manufacturing method of a semiconductor device in which a
semiconductor substrate is subjected to processing includes pre-processing and post-
processing, comprising;

a pre-processing step to process a semiconductor substrate;

a measurement step to measure a characteristic of said semiconductor substrate
processed at said pre-processing step;

a setup step to set a processing condition for post-processing based on a result of
the measurement at said measurement step;

a post-processing step to process said semiconductor substrate using said
processing condition; and

an inspection step to inspect a characteristic of said semiconductor substrate
processed at said post-processing step and to judge whether compliance with a
predetermined standard is found or not,

and further comprising re-processing said semiconductor substrate judged not
complying with said standard at said inspection step such that said semiconductor
substrate complies with said standard, wherein said measurement step is a step to
measure at least one dimension selected between a film thickness and a width of a
predetermined portion of said semiconductor substrate.

8. (Withdrawn) A manufacturing system for semiconductor device includes
a pre-processing apparatus and a post-processing apparatus, comprising:

a pre-processing apparatus to perform pre-processing on a semiconductor
substrate;

a measurement apparatus to measure a characteristic of said semiconductor substrate processed by said preprocessing;

a setup apparatus to set a processing condition for post-processing based on a result of the measurement performed by said measurement apparatus;

a post-processing apparatus to perform post-processing on said semiconductor substrate using said processing condition;

an inspection apparatus to inspect a characteristic of said semiconductor substrate processed by said post-processing; and

an evaluation apparatus to judge whether a result of the inspection by said inspection apparatus complies with a predetermined standard or not,

and characterized in that said pre-processing apparatus and/or said post-processing apparatus reprocesses) said semiconductor substrate judged not complying with said standard by said evaluation apparatus, such that said semiconductor substrate complies with said standard.

9. (Withdrawn) The manufacturing system according to claim 8, characterized in further comprising a re-processing condition setup apparatus to set a re-processing condition for said pre-processing apparatus and/or said post-processing apparatus based on the result of the inspection by said inspection apparatus.

10. (Withdrawn) The manufacturing system according to claim 8, characterized in that said pre-processing apparatus is a deposition apparatus and said post-processing apparatus is an etching apparatus.

11. (Withdrawn) The manufacturing system according to claim 8, characterized in that said measurement apparatus is an apparatus to measure one

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dimension selected between a film thickness and a width of a predetermined portion of said semiconductor substrate.